

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) Equipment for the heat treatment of a target zone of biological tissue ~~(410)~~, comprising:

- energy generating means ~~(100)~~ for supplying energy locally in the target zone;
- means ~~(200)~~ for measuring and recording ~~a~~ the temperature in the target zone;
- a control unit ~~(300)~~ comprising means ~~(330)~~ for determining, from the temperature measured in the target zone, ~~an~~ the amount of energy having to be supplied to the target zone necessary to reach and maintain a desired temperature in the target zone, and means for controlling ~~(350)~~ the energy generating means ~~(100)~~ to deliver the amount of energy having to be supplied this power value;

~~characterized in that~~ the control unit ~~(300)~~ further comprising furthermore ~~comprises~~ means ~~(320)~~ ~~offor~~ numerically processing, point by point, ~~the~~ a spatial temperature distribution in the target zone and its surroundings, in order to calculate temperature gradients.

2. (Currently Amended) The ~~heat treatment~~ equipment as claimed in claim 1, ~~characterized in that~~ wherein the control unit ~~(300)~~ further comprises furthermore ~~comprises~~ means ~~(340)~~ for estimating ~~the~~ local heat energy losses, from an estimate of the heat conduction and of the spatial temperature distribution in the target zone and its surroundings.

3. (Currently Amended) The ~~heat treatment~~ equipment as claimed in ~~one of the preceding claims~~ claim 1, ~~characterized in that~~ wherein the energy generating means ~~(100)~~ emits focused ultrasound.

4. (Currently Amended) The ~~heat treatment~~ equipment as claimed in claim 1 ~~one of the preceding claims~~, ~~characterized in that~~ wherein the means ~~(200)~~ for measuring and recording the spatial temperature distribution further comprise a magnetic resonance imaging apparatus.

5. (Currently Amended) The ~~heat treatment~~ equipment as claimed in claims 1, 2, 3 or 4 ~~one of the preceding claims, characterized in that it comprises~~ further comprising means for evaluating the spatial distribution, in the target zone and its surroundings, of the amount of energy having to be supplied to the target zone.